We claim:

1. A method of extending corneal graft survival following corneal transplantation in a patient, comprising:

administering to said patient an effective amount of a pharmaceutical composition comprising a vascular endothelial growth factor receptor-3 (VEGFR-3) inhibitor,

whereby lymphangiogenesis is suppressed in the cornea of said patient.

2. The method of claim 1, wherein said VEGFR-3 inhibitor is a dominant negative VEGFR-3 receptor.

3. The method of claim 2, wherein said dominant negative VEGFR-3 receptor is kinase-inactive.

4. The method of claim 2, wherein said dominant negative VEGFR-3 receptor is soluble.

5. The method of claim 1, wherein said VEGFR-3 inhibitor is a nucleic acid molecule encoding a dominant negative VEGFR-3 receptor.

6. The method of claim 5, wherein said dominant negative VEGFR-3 receptor is kinase-inactive.

7. The method of claim 5, wherein said dominant negative VEGFR-3 receptor is soluble.

8. The method of claim 1, wherein said VEGFR-3 inhibitor is a VEGFR-3 kinase inhibitor.

9. The method of claim 8, wherein said VEGFR-3 kinase inhibitor binds the VEGFR-3 catalytic domain.

10. The method of claim 9, wherein said VEGFR-3 kinase inhibitor is an ATP analog.

11. The method of claim 1, wherein said VEGFR-3 inhibitor is a VEGFR-3 binding molecule.

12. The method of claim 11, wherein said VEGFR-3 binding molecule binds the VEGFR-3 extracellular domain.

13. The method of claim 11, wherein said VEGFR-3 binding molecule is anti-VEGFR-3 antibody material.

14. The method of claim 13, wherein said anti-VEGFR-3 antibody material is monoclonal.

15. The method of claim 1, wherein said VEGFR-3 inhibitor down-regulates VEGFR-3 expression.

16. The method of claim 15, wherein said VEGFR-3 inhibitor is a sequence-specific ribonuclease.

17. The method of claim 16, wherein said sequence-specific ribonuclease is a ribozyme.

18. The method of claim 15, wherein said VEGFR-3 inhibitor is a VEGFR-3 antisense nucleic acid molecule.

19. The method of claim 1, wherein said VEGFR-3 inhibitor is anti-VEGF-C neutralizing antibody material.

20. The method of claim 19, wherein said anti-VEGF-C neutralizing antibody material is monoclonal.

21. The method of claim 1, wherein said VEGFR-3 inhibitor down-regulates VEGF-C expression.

22. The method of claim 21, wherein said VEGFR-3 inhibitor is a sequence-specific ribonuclease.

23. The method of claim 22, wherein said sequence-specific ribonuclease is a ribozyme.

24. The method of claim 21, wherein said VEGFR-3 inhibitor is a VEGF-C antisense nucleic acid molecule.

25. The method of claim 1, comprising administering a pharmaceutical composition comprising a cell that secretes said VEGFR-3 inhibitor.

26. The method of claim 1, further comprising administering to said patient an anti-angiogenic agent.

27. The method of claim 1 or claim 26, further comprising administering to said patient an immunosuppressive agent.

28. The method of claim 1, wherein said pharmaceutical composition is administered prior to corneal transplantation.

29. The method of claim 1, wherein said pharmaceutical composition is administered subsequent to corneal transplantation.

30. The method of claim 1, comprising administering to said patient an effective amount of a pharmaceutical composition comprising a VEGFR-3 inhibitor two or more times.

31. The method of claim 30, comprising repeated administration over a period of at least one month.

32. The method of claim 30, comprising repeated administration over a period of at least six months.

33. The method of claim 30, comprising:

(a) administering to said patient prior to corneal transplantation a pharmaceutical composition comprising a VEGFR-3 inhibitor; and

(b) administering to said patient subsequent to corneal transplantation a pharmaceutical composition comprising a VEGFR-3 inhibitor,

whereby lymphangiogenesis is suppressed in the cornea of said patient.

34. The method of claim 1, comprising systemic administration of said pharmaceutical composition.

35. The method of claim 1, comprising local administration of said pharmaceutical composition.

36. The method of claim 35, comprising topical administration of said pharmaceutical composition.

37. The method of claim 35, comprising local injection of said pharmaceutical composition.

38. The method of claim 35, said pharmaceutical composition released from an intraocular or periocular implant.